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(3560)

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January 9, 2003

Mr. Bob Norcross, Electric Division Administrator
Public Service Commission
P.O. Box 7854
Madison, WI 53707-7854

RE: In the Matter of Filing Reporting Requirements for Appropriate Inspection and Maintenance, PSC Rule 113.0607(6)

Dear Mr. Norcross:

Enclosed for filing are 3 copies of Menasha Utilities' report to the commission, submitted every two years, showing compliance with its Preventative Maintenance Plan.

Sincerely,

Carl J. Verhagen, P.E.
Manager of Engineering and Operations

Enclosures

TWO YEAR REPORT DOCUMENTING COMPLIANCE WITH THE PREVENTATIVE MAINTENANCE PLAN

Menasha Utilities

FILING DEADLINE
FEBRUARY 1, 2003

January 9, 2003

Carl Verhagen

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This report format was prepared by the MEUW work group for PSC Rule 113.0607 for use by the 82 municipal electric utilities in Wisconsin and endorsed by PSC staff as meeting the requirements of Rule PSC 113.0607.

I Reporting Requirements: PSC 113.0607(6) states;

Each utility shall provide a periodic report to the commission showing compliance with its Preventative Maintenance Plan. The report shall include a list of inspected circuits and facilities, the condition of facilities according to established rating criteria, schedules established and success at meeting the established schedules.

II Inspection Schedule and Methods:

SCHEDULE:	MONTHLY	ANNUAL	EVERY 5 YEARS
Substations	X	X	
Distribution (OH & UG)		X - URD	X - OH

METHODS: Five criteria groups will be used to complete the inspection of all facilities.

1. IR – infrared thermography used to find poor electrical connections and/or oil flow problems in equipment.
2. RFI - Radio Frequency Interference, a byproduct of loose hardware and connections, is checked using an AM radio receiver.
3. SI – structural integrity of all supporting hardware including poles, crossarms, insulators, structures, bases, foundations, buildings, etc.
4. Clearance – refers to proper spacing of conductors from other objects, trees and conductors.
5. EC – equipment condition on non-structural components such as circuit breakers, transformers, regulators, reclosers, relays, batteries, capacitors, etc.

Distribution facilities will be inspected by substation circuits on a 5 year cycle such that the entire system will be inspected every 5 years. Inspector instructions for inspecting all facilities and forms are included in the plan.

III Condition Rating Criteria

This criterion, as listed below, establishes the condition of a facility and also determines the repair schedule to correct deficiencies.

0) Good condition
1) Good condition but aging
2) Non-critical maintenance required – normally repair within 12 months
3) Priority maintenance required – normally repair within 90 days
4) Urgent maintenance required – report immediately to the utility and repair normally within 1 week

IV Corrective Action Schedule

The rating criteria as listed above determine the corrective action schedule.

V Record Keeping

All inspection forms and records will be retained for a minimum of 10 years. The inspection form contains all of the required critical information i.e. inspection dates, condition rating, schedule for repair and date of repair completion.

VI Reporting Requirements

A report and summary of this plan's progress will be submitted every two years with the first report due to the Commission by February 1, 2003. The report will consist of a cover letter documenting the percent of inspections achieved compared to the schedule and the percent of maintenance achieved within the scheduled time allowance.

VII Inspected Circuits and Facilities

Circuit # and description	Substations
Ckt 2 4160v	**Power Plant – Station #1**
Ckt 5 4160v	**Melissa – Station #2**
Ckt 6 4160v	**North Side – Station #3**
Ckt 7 4160v	**Tayco – Station #4**
Ckt 8 4160v	**Milwaukee – Station #5**
Ckt 13-1-2 13200v	**Meadows – Station #6**
Ckt 13-4-2 13200v	
All URD – 4160 & 13200v	
Ckt 34-1-4	
Ckt 34-1-3	

Base load and peaking generation, less than 50 megawatts per unit in size, is typically subject to pre-operational checks, in addition to checks and maintenance during and after periods of operation.

The Menasha Utilities has a 24 MW coal fired power plant consisting of two units, a 16 MW and 9MW unit. Both of units are leased to WPPI, and are dispatched for reliability and economic reasons. These units typically operated from June through August and again in December and/or January. Annually, during the other months, inspections and routine maintenance are performed on the generators, boilers and associated equipment to prepare the plant for its next run assignment. All routine inspections and repairs were completed within the allowable timeframe and units are ready for dispatch.

VIII Scheduling Goals Established and Success of Meeting the Criteria:

It was this utility's goal to 1) inspect all substations monthly and to exercise all substation disconnects and breakers annually, 2) to annually inspect 20% of all the distribution circuits (5 of 19 circuits), and 3) to tree trim 25% of the distribution system. Further, we expected to complete all scheduled maintenance resulting from these inspections within the prescribed time periods specified in the rating criteria.

Substations

All of the substation goals and were met. Two Non-critical maintenance items (leaking gas seals on two SF-6 type 34.5 KV breakers) were reported and repaired within 12 months.

Distribution

During the past two years 59% of the distribution ckts were inspected rather than the planed 20%. One (1) urgent repair item was found with infrared and repaired within 7 days. Of the six (6) priority and non critical maintenance items found, five (5) were repaired within a month. The remaining one (1) will be repaired in spring 2003. 100% of the URD system was inspected finding eight (8) critical maintenance items, all of which were repaired in 7 days. The tree-trimming program completed 30% of the distribution system rather than 25%.

IX Facility condition – rating criteria:

All six (6) substations are in (O) Good Condition.

The 34.5 KV and 13.2 KV circuits inspect under this report are in (0) Very Good Condition. Most of the 13.2 and 34.5 KV systems are less than 20 years old and are in very good condition. The 4 K circuits inspected are in (1) Good Condition but aging. Much of the original 4 KV system has be converted to the 13.2 KV system. The remaining 4 KV ckts will be convert to the 13.2 KV system over the next five years, as budgets and time permits.

For Customer Outages, five minutes or longer, Menasha Utilities had an 80% decrease in storm or weather related outage in 2002. Overall, for 2002, Menasha Utilities has had a 18% decrease in the total number of customer outages compared to 2001.